

# I-225 Reconfiguration Monthly Performance Report

March 2018

Prepared by:



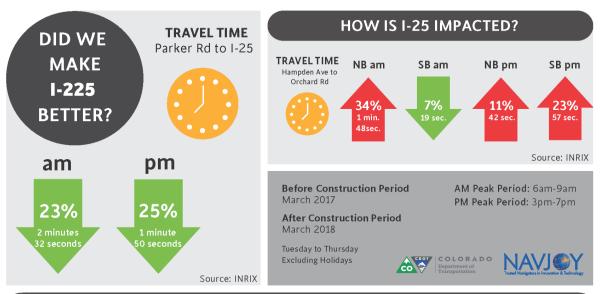
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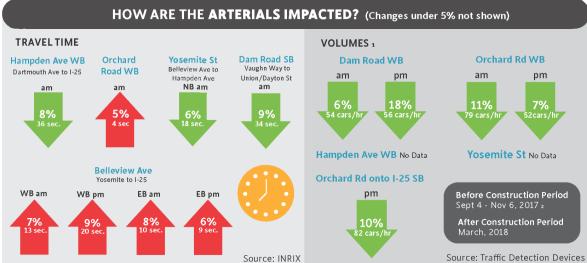
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# **Executive Summary**





<sub>1</sub>Volume differences on Orchard WB are averaged over multiple intersections.

2No data available for March 2017





# Section 1: I-225 Update

# To Date, How Are Travel Times Changing Following Construction on I-225?

Measure: Average travel time during the AM and PM peak period Tuesday - Thursday from November 14, 2016 – March 29, 2018

Source: INRIX

**AM Peak Period:** Tuesday - Thursday 6AM to 9AM **PM Peak Period:** Tuesday - Thursday 3PM to 7PM

**Before Construction Period:** November 14, 2016 – November 3, 2017 **After Construction Period:** November 14, 2017 – March 29, 2018

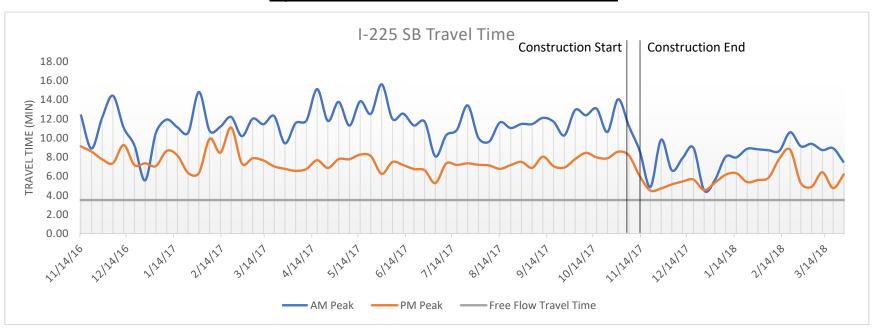


Figure 1: I-225 SB - Parker to I-25 Travel Time Trend

We will continue to monitor I-225 SB as the months progress to see if travel times return to pre-construction levels or remain lower.





# **Section 2: Travel Times**

# **How Do Travel Times This Year Compare to Last** Year?

Measure: Average travel time during the AM and PM peak period Tuesday - Thursday (travel times are averaged over each peak period, each day, which are then averaged over the month)

Source: INRIX

AM Peak Period: Tuesday - Thursday 6AM to 9AM PM Peak Period: Tuesday - Thursday 3PM to 7PM

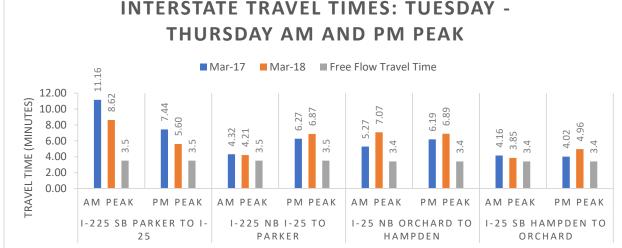
#### **Interstate Travel Times**

#### Notable Changes in February '18

- It takes 2 minutes and 32 seconds less to travel SB on I-225 from Parker to I-25 in the AM Peak
- It takes 1 minute and 50 seconds less to travel SB on I-225 from Parker to I-25 in the PM Peak
- It takes 1 minute and 48 seconds more to travel NB on I-25 from Orchard to Hampden in the AM Peak
- It takes 57 seconds more to travel SB on I-25 from Hampden to Orchard in the PM Peak
- It takes 42seconds more to travel NB on I-25 from Orchard to Hampden in the PM Peak

Figure 2: Interstate Travel Times

# INTERSTATE TRAVEL TIMES: TUESDAY -THURSDAY AM AND PM PEAK





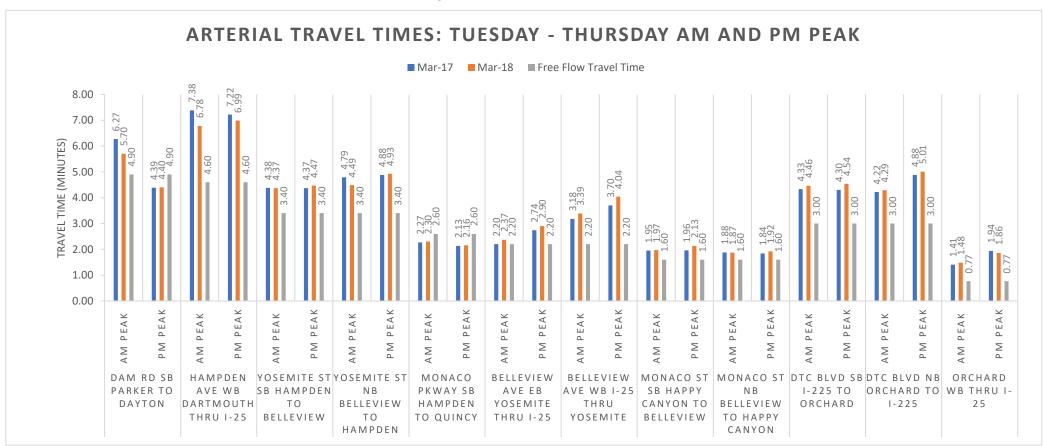


#### **Arterial Travel Times**

#### **Notable Changes in February '18**

- It takes 36 seconds less to travel WB on Hampden Ave from Dartmouth to I-25 in the AM Peak
- It takes 34 seconds less to travel SB on Dam Rd from Parker to Dayton in the AM Peak
- It takes 20 seconds more to travel WB on Belleview Ave from Yosemite to I-25 in the PM Peak

Figure 3: Arterial Travel Times







### **Travel Time Ranges**

For a more in-depth look at travel times within the project network, we broke up each peak period into 15-minute intervals. Below we reported the average minimum and maximum travel time for the month of March 2017 and March 2018 along each corridor. Decreases are represented in green, and increases are represented in red.

		Mar '17	Mar '17	Mar '18	Mar '18
Corridor	Peak	Min	Max	Min	Max
I-225 SB Parker to I-25	AM Peak	4.38	15.64	4.13	12.94
	PM Peak	4.87	10.00	4.17	8.72
I-225 NB I-25 to Parker	AM Peak	4.13	4.68	4.05	4.50
	PM Peak	4.44	8.51	4.40	10.50
I-25 NB Orchard to Hampden	AM Peak	3.40	7.85	3.33	11.10
	PM Peak	3.94	8.69	3.94	8.87
I-25 SB Hampden to Orchard	AM Peak	3.48	5.50	3.43	4.43
	PM Peak	3.49	4.53	3.49	8.27
Dam Rd SB Parker to Dayton	AM Peak	4.75	8.41	4.55	8.43
	PM Peak	4.12	4.59	4.23	4.75
Hampden Ave WB Dartmouth through I-25	AM Peak	5.11	9.84	5.31	9.08
	PM Peak	6.13	8.44	6.15	8.08
Yosemite St SB Hampden to Belleview	AM Peak	3.94	5.05	3.66	5.44
	PM Peak	3.89	4.99	3.94	5.09
Yosemite St NB Belleview to Hampden	AM Peak	4.21	5.32	3.91	5.55
	PM Peak	4.16	6.05	4.21	6.02
Monaco Pkway SB Hampden to Quincy	AM Peak	1.99	2.46	2.15	2.45
	PM Peak	1.95	2.32	1.93	2.44
Belleview Ave EB Yosemite through I-25	AM Peak	1.73	3.01	1.89	2.90
	PM Peak	2.18	3.38	2.35	3.64
Belleview Ave WB I-25 through Yosemite	AM Peak	2.76	3.83	2.76	4.27
	PM Peak	3.04	4.63	3.10	5.30
Monaco St SB Happy Canyon to Belleview	AM Peak	1.79	2.49	1.81	2.26
	PM Peak	1.86	2.15	1.91	2.49
Monaco St NB Belleview to Happy Canyon	AM Peak	1.77	2.24	1.79	2.00
	PM Peak	1.72	2.11	1.72	2.22
DTC Blvd SB I-225 to Orchard	AM Peak	3.67	5.16	4.04	5.05
510 5144 351 223 to Orthard	PM Peak	3.74	5.10	3.89	5.51
DTC Blvd NB Orchard to I-225	AM Peak	3.91	4.51	3.82	4.76
	PM Peak	4.15	6.06	4.16	6.18
Orchard WB through I-25	AM Peak	1.13	1.79	1.15	1.82
	PM Peak	1.33	2.59	1.18	2.66





# **Travel Time Index Network Analysis**

**AM Peak** 

#### **Pain Points to Observe**

Orchard Rd EB from I-25 to DTC Blvd





#### PM Peak

#### **Pain Points to Observe**

- Belleview WB from DTC Blvd to I-25
- Hampden WB from Monaco to I-25





#### **Planning Time Index**

Measure: PTI – the ratio of the 95<sup>th</sup> percent peak period travel time to the free flow travel time

Source: INRIX

**AM Peak Period:** Tuesday - Thursday 6AM to 9AM **PM Peak Period:** Tuesday - Thursday 3PM to 7PM

#### Interstate PTI

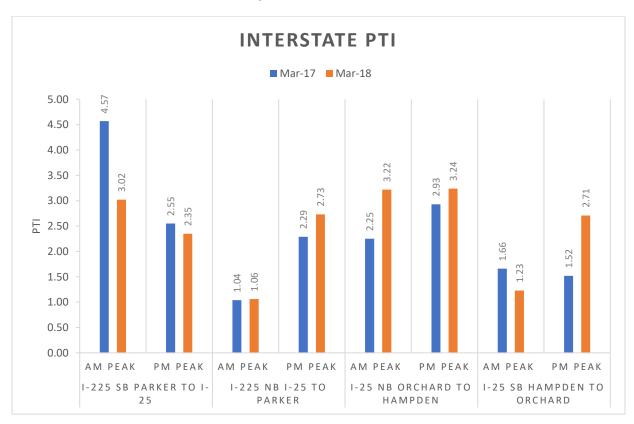
#### Notable Changes in February '18

- PTI <u>decreased</u> by 1.55 on I-225 SB from Parker to I-25 in the AM Peak
- PTI decreased by 0.43 on I-25 SB from Hampden to Orchard in the AM Peak

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- PTI <u>increased</u> by 1.19 on I-25 SB from Hampden to Orchard in the PM Peak
- PTI increased by 0.97 on I-25 NB from Orchard to Hampden in the AM Peak

#### Figure 4: Interstate PTI



<sup>\*</sup>Inconsistently high PTIs may be indicative of construction or incidents during that time.



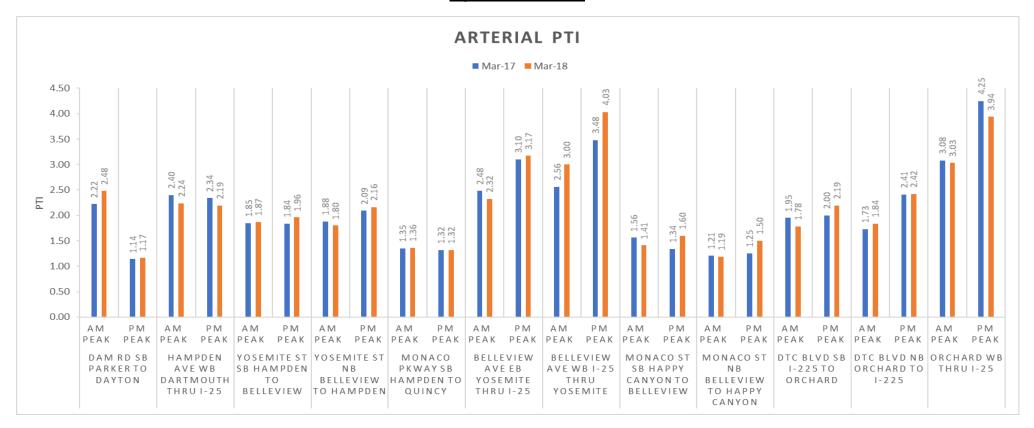


#### **Arterial PTI**

#### **Notable Changes in February '18**

- PTI increased by 0.55 on Belleview Ave WB from I-25 to Yosemite in the PM Peak
- PTI increased by 0.44 on Belleview Ave WB from I-25 to Yosemite in the AM Peak

Figure 5: Arterial PTI







# **Section 3: Volumes**

# **Have Volumes Changed Following Construction?**

Measure: Average daily peak-hour volume

Source: Ramp Meter Devices (Interstates), Traffic Detection Cameras (Arterials)

**AM Peak Period:** Monday - Friday 6AM to 9AM **PM Peak Period:** Monday - Friday 3PM to 7PM

#### **Arterial Volumes**

#### Notable Changes in February '18

- There are 74 more vehicles/hour going WB on Belleview @ DTC Pkwy in the AM Peak
- There are 143 less vehicles/hour going WB on Orchard @ DTC Blvd in the AM Peak
- There are 142 <u>less</u> vehicles/hour going WB on Belleview @ DTC Blvd in the AM Peak
- There are 89 <u>less</u> vehicles/hour going WB on Belleview @ DTC Blvd in the PM Peak
- There are 82 less vehicles/hour turning onto I-25 SB @ Orchard in the PM Peak

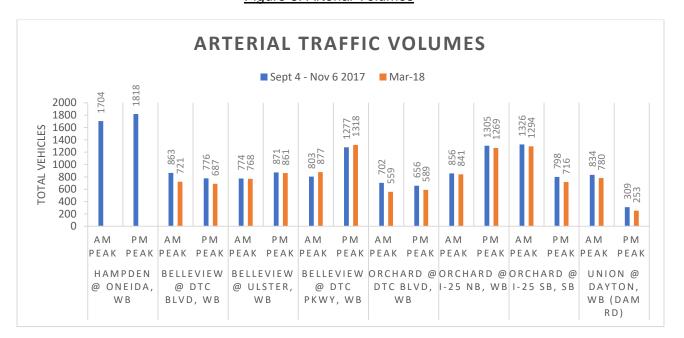


Figure 6: Arterial Volumes

<sup>\*</sup>Note that the "historic" comparison is Sept 4 – Nov 6, 2017 (Before Construction). This was due to limited historical data that did not let us use February 2018 as a comparison point.





<sup>\*</sup>There is no current data available for Ramp Meter, Interstate, or Hampden Volumes\*

# **Section 4: Project and Report Updates**

This is a monthly report that will continue to evolve and display the most current and accurate data possible.

Please note, COGNOS interstate/ramp volume data is unavailable for March 2018. We will check each month for this data.

# **Section 5: Overall Conclusions**

Based on the travel time data presented in this report, we are observing consistent patterns with the February data. I-225 SB has remained 23% faster and I-25 NB continues to show degradation in the AM Peak. This month, we observed greater degradation on I-25 SB in the PM Peak than previously. Belleview Ave continues to show degradation in the peak periods, with overall route improvements on Dam Rd and Hampden Ave.



